

WHAT IS CLAIMED IS:

1. A method of communicating data over a voice channel of a wireless communication system, comprising:
 - 5 receiving a first periodic data signal;
modulating the first periodic data signal to produce a second periodic data signal, wherein the modulation includes inserting a predetermined silence period at timed intervals into the first periodic data signal to produce the second periodic data signal; and
 - 10 communicating the second periodic data signal over the voice channel of the wireless communication system.
2. The method of claim 1, wherein the first periodic data signal is a data sequence modulated through frequency shift keying.
3. The method of claim 1, wherein the predetermined silence period is
15 from about 25 milliseconds to about 1000 milliseconds.
4. The method of claim 1, wherein the wireless communication system utilizes a network transmission standard selected from the group consisting of: Code Division Multiple Access, Time Division Multiple Access, Frequency Division Multiple Access and Groupe Speciale Mobile.
- 20 5. The method of claim 1, wherein the second periodic data signal is a first component of an initial data link authentication process.

6. The method of claim 5, wherein communicating the second periodic data signal over the voice channel of the wireless communication system comprises:

5 transmitting the second periodic data signal over the voice channel of the wireless communication system;
receiving the second periodic data signal at a transceiver; and
receiving a third data signal from the transceiver, wherein the third periodic data signal is a second component of an initial data link authentication
10 process.

7. The method of claim 1, wherein modulating the first periodic data signal to produce the second periodic data signal comprises:

receiving a control signal, the control signal supplying parameters
15 for a length of the predetermined silence period and timing of the periodic intervals; and
modulating the first periodic data signal responsive to the received control signal to produce the second periodic data signal.

20 8. The method of claim 1, wherein the predetermined silence period is variable.

9. The method of claim 8, further comprising:
receiving a response to the second periodic data signal over the
25 voice channel of the wireless communication system; and
varying the predetermined silence period length responsive to the response.

10. A computer readable medium storing a computer program comprising:
computer readable code for directing the reception of a first periodic
5 data signal;
computer readable code for modulating the first periodic data signal to produce a second periodic data signal, wherein the modulation includes inserting a predetermined silence period at periodic intervals into the second periodic data signal; and
10 computer readable code for communicating the second periodic data signal over the voice channel of the wireless communication system.

11. The computer readable medium of claim 10, wherein the first periodic data signal is a data sequence modulated through frequency shift
15 keying.

12. The computer readable medium of claim 10, wherein the predetermined silence period is from about 25 milliseconds to about 1000
20 milliseconds.

13. The computer readable medium of claim 10, wherein the wireless communication system utilizes a network transmission standard selected from the group consisting of: Code Division Multiple Access, Time Division Multiple Access, and Groupe Speciale Mobile.
25

14. The computer readable medium of claim 10, wherein the second periodic data signal is a first component of an initial data link authentication process.

15. The computer readable medium of claim 14, wherein the computer readable code for communicating the second periodic data signal over the voice channel of the wireless communication system comprises:

5 computer readable code for directing the transmission of the second periodic data signal over the voice channel of the wireless communication system;

computer readable code for directing the reception of the second periodic data signal at a transceiver; and

10 computer readable code for directing the reception of a third periodic data signal from the transceiver, wherein the third periodic data signal is a second component of an initial data link authentication process.

16. The computer readable medium of claim 10, wherein the computer readable code for modulating the first periodic data signal to produce the second periodic data signal comprises:

computer readable code for directing the reception of a control signal, the control signal supplying parameters for a length of the predetermined silence period and timing of the periodic intervals; and

20 computer readable code for modulating the first periodic data signal responsive to the received control signal to produce the second period data signal.

17. The computer readable medium of claim 10, wherein the predetermined silence period is variable.

25

18. The computer readable medium of claim 17, further comprising:
computer readable code for directing the reception of a response to
the second periodic data signal over the voice channel of the wireless
5 communication system; and
computer readable code for varying the predetermined silence
period length responsive to the response.

19. A system for providing communication data over a voice channel of
10 a wireless communication system, comprising:
means for receiving a first periodic data signal;
means for modulating the first periodic data signal to produce a
second periodic data signal, wherein the modulation includes inserting a
predetermined silence period at timed intervals into the first periodic data signal
15 to produce the second periodic data signal; and
means for communicating the second periodic data signal over the
voice channel of the wireless communication system.